A design document, giving the overall structure of your solution, showing the ***classes*** and ***methods*** as a diagram or table, with ***a brief (one sentence) description of the intention*** of each.

Class: *accounts*	
Intention: The class to store account information including balance	
Methods	**Intentions**
accounts(int number, long balance, String name)	Constructor for the accounts class, set values to local attributes
setBalance(double number)	Call by other class in order to modify the balance
getAccountNumber()	Return the account number
getAccountBalance()	Return the account balance
getAccountName()	Return the account name
toString()	To String method

Class: *transfer*	
Intention: transfer class	
Methods	**Intentions**
transfer(boolean loginStats, Map<String, accounts> balanceStorage, Map<String, double[]> acctLimit, String mode,Scanner sc)	Constructor method to set the attributes
transferProcess()	transfer
transferCheck(String input)	Check if the transfer input(from account + to account + amount + name) is valid or not.

Class: *withdraw*	
Intention: withdraw class	
Methods	**Intentions**
withdraw(boolean loginStats, Map<String, accounts> balanceStorage, Map<String, double[]> acctLimit, String mode,Scanner sc)	Constructor method to set the attributes
withdrawProcess()	withdraw
withdrawCheck(String input)	Check if the withdraw input(account number + amount) is valid or not.

Class: *deposit*	
Intention: deposit class	
Methods	**Intentions**
deposit(boolean loginStats, Map<String, accounts> balanceStorage, Map<String, double[]> acctLimit, String mode,Scanner sc)	Constructor method to set the attributes
depositProcess()	Deposit
depositCheck(String input)	Check if the deposit input(account number + amount) is valid or not.

Class: *banking*	
Intention: The main system	
Methods	**Intentions**
login(Scanner sc)	Log in function
modeCheck()	Check if the current mode satisfied the requirement
loginCheck()	Check the constraints for login
logout(Scanner sc)	Log out function
logoutCheck()	Check the constraints for logout
createacc(Scanner sc)	Create account function.
deleteacc(Scanner sc)	Delete account function.
deposit(Scanner sc)	Deposit function.
withdraw(Scanner sc)	Withdraw function.
transfer(Scanner sc)	Transfer function.
transactionCheck(String transaction)	Check the transaction summary file for each line must be less than or equal to 61 characters
mergeFile()	Merge the temp transaction file to master transaction file
readFile(String fileName)	Read master account list and transaction summary file from the device
updateMaster()	Update the master account list file with new transactions
reverseSort()	Reverse sort the account number using bubble sort
writeFile(String[] path)	Write the updated file back to the device
operation(ArrayList<String> accountList, ArrayList<String> transactionList, String[] path,Scanner sc)	The operation function manages all the input command from the user and call each function based on the input
main(String args[])	The main function of the program.

Class: *transactionCheck*	
Intention: class to check transaction summary file	
Methods	**Intentions**
transactionCheck(String transaction)	Constructor method to set the attributes
transactionCheckCons()	Check the transaction summary file for each line must be less than or equal to 61 characters
transactionCons2(String transaction)	Check the transaction summary file for operational code
transactionCons3(String transaction)	Check the transaction summary file for space separation
transactionCons4(String[] details)	Check the transaction summary file for account number not starting with 0
transactionCons5(String[] details)	Check the transaction summary file for amounts between three and eight digits
transactionCons6(String[] details)	Check the transaction summary file for account names between 3 and 30 characters with no special letters
transactionCons7(String[] details)	Check the transaction summary file for unused number fill of 0
transactionCons8(String[] details)	Check the transaction summary file for unused string fill of *

Class: *accountOperation*	
Intention: Class for delete account and create account	
Methods	**Intentions**
accountOperation(boolean loginStats, Map<String, accounts> balanceStorage, Map<String, double[]> acctLimit, String mode,ArrayList<String> tempAccountList, Scanner sc)	Constructor method to set the attributes
createacc()	Create account function.
checkAcct(String newAcct)	Check if the input string(account number + name) is valid or not.
isInteger(String input)	Check if a string only contains integers.
isAlphanumeric(String input)	Check if a string only contains letters, numbers and spaces.
deleteacc()	Delete account function.